

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (canceled)

Claim 2 (Currently amended): A plasma etching apparatus comprising:

a processing chamber in which a plasma etching process is performed;

a monitoring window of transparent material, said monitoring window being disposed in a side wall of said processing chamber so as to have an inner surface that faces the interior of the processing chamber and an outer surface at an outer side of the processing chamber, the outer surface being substantially parallel to the inner surface, a solid portion of the monitoring window ~~at an outer side of the processing chamber~~ extending from a central portion of the outer surface in a direction away from the interior of the processing chamber to thus form a protrusion such that the protrusion has an inner end terminating at the outer surface, and an outer end that is more remote from the interior of the processing chamber than the inner end, and said monitoring window having a flute at an inner surface thereof that faces the interior of said processing chamber, the flute being aligned with said protrusion in the direction in which the protrusion extends, and the flute being located no deeper in the window than the inner end of the protrusion;

a heater centered about the protrusion to provide heat to the protrusion at the

circumference thereof and thereby direct heat towards a portion of the monitoring window provided with the flute;

an optical detector mounted outside said processing chamber and in alignment with the flute of the monitoring window via said protrusion so as to detect a change in the process occurring in said chamber via the flute.

Claims 3 – 7 (canceled)